Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Proposed Changes in the Commission's	)	
Rules Regarding Human Exposure	)	ET Docket No. 03-137
To Radiofrequency Electromagnetic	)	
Fields	)	
	)	

COMMENTS OF ITRON, INC.

Itron, Inc. ("Itron"), by its attorneys, respectfully submits these Comments in response to the Notice of Proposed Rulemaking ("*NPRM*") issued in the above-captioned proceeding.[1] As set forth below, Itron asks the Commission to clarify that the new Specific Absorption Rate ("SAR") evaluation requirement proposed in revised Section 2.1093(c) does not apply to Section 15.247 devices that are not intended for consumer use. In the alternative, should the Commission determine that the new SAR evaluation requirement applies to both consumer and commercial devices authorized under Section 15.247, Itron requests that pre-compliance equipment be permitted for SAR testing of such commercial devices.

Itron is the nation's leading manufacturer and supplier of automatic meter reading ("AMR") systems using unlicensed Part 15 devices that operate in the 902-928 MHz band. Itron supplies its RF-based AMR systems to electric, gas, and water utility companies nationwide. Itron's AMR systems enable a utility to monitor business and residential meters from a remote location using a hybrid architecture that employs both licensed and unlicensed frequencies. On the unlicensed side, in many of Itron's systems

utility consumption information is transmitted from meter modules handheld devices operating in the unlicensed 902-928 MHz band.

In the *NPRM*, the Commission proposes "to require SAR evaluation of *consumer* devices that are authorized under Section 15.247, and designed for use within 20 cm of the body, if the maximum peak output power of the devices exceeds 100 milliwatts (mW)."[2] Although the body of the *NPRM* states that the Commission's concern is with Section 15.247 devices intended for consumer use, the proposed changes to Section 2.1093(c) of the rules appearing in an appendix to the *NPRM* do not distinguish between consumer and non-consumer (*i.e.*, commercial use) devices authorized under Section 15.247.[3] Hence, revised Section 2.1093(c), as currently drafted, would require SAR evaluation for all devices authorized under Section 15.247 that exceed the 100 mW output power level, not just devices intended for consumer use.

Itron asks the Commission to clarify that the new SAR evaluation requirement contained in revised Section 2.1093(c) is confined to consumer devices authorized under Section 15.247. This clarification would be in keeping with the Commission's statement in the *NPRM* that its concern is with higher-powered consumer devices such as cordless telephones.[4] Unlike these consumer devices, higher-powered commercial devices authorized under Section 15.247, such as Itron's handheld AMR units, will be used by experienced and trained professionals. Thus, as the Commission suggests in the *NPRM*,

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[1] *See In re Proposed Changes in the Commission's Rules Regarding Human Exposure to Radiofrequency Electromagnetic Fields*, Notice of Proposed Rulemaking, 18 FCC Rcd 13187 (2003) ("*NPRM*").
[2] *NPRM* at ¶ 18 (emphasis added). Under the current rules, routine RF exposure evaluation of SAR is not required for devices authorized under Section 15.247. *See id*.
[3] *See* Revised § 2.1093(c) ("Portable devices authorized under § 15.247 of part 15 of this chapter are subject to routine evaluation for RF exposure prior to equipment authorization or use if the maximum peak output power of the device exceeds 100 milliwatts (100 mW).").
[4] *NPRM* at ¶ 18.

there is no need to adopt the same strict SAR testing requirements for devices restricted to commercial use as will be applied to consumer devices.[5]

In the alternative, should the Commission determine that the new SAR evaluation requirement will apply to both consumer and commercial devices authorized under Section 15.247, Itron requests that "pre-compliance" SAR testing equipment be permitted for evaluating portable devices intended for commercial-only use. Under the current RF rules, only "compliance" equipment may be used for SAR testing.[6] However, such equipment is expensive and requires a high degree of maintenance, which will make it difficult for many manufacturers of unlicensed equipment, whose products for the most part are exempt from SAR requirements, to perform SAR testing in-house according to the Commission's specifications. Likewise, outsourcing SAR testing is problematic because SAR compliance equipment is not readily available in all parts of the country.[7]

As an alternative to SAR compliance equipment, Itron suggests the use of pre-compliance equipment for the testing of commercial devices authorized under Section 15.247. Pre-compliance equipment is less expensive, requires less maintenance, and is more readily available than compliance equipment. As an example, the MapSAR pre-compliance system is capable of system verification procedures in accordance with a spherical equivalent of the flat surface requirements specified in IEEE 1528. Moreover, unlike compliance units, the fluids are not exposed in a MapSAR unit, and evaporation

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[5] Indeed, the Commission's RF rules already distinguish between "occupational" and "general public" RF exposure limits. *See, e.g.*, 47 C.F.R. § 1.1310. "Occupational/controlled" exposure, as used by the Commission, applies to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over the their exposure. *See In re Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation*, Report and Order, 11 FCC Rcd 15123, ¶ 43 (1996).

[6] "Compliance" equipment, as it is known in the industry, is equipment that meets the Commission's formal requirements for SAR testing.

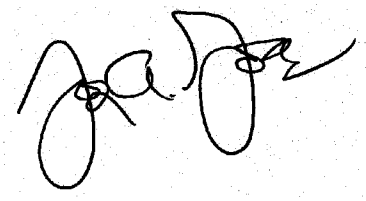
[7] For example, there is no test facility in the Twin Cities area that is capable of performing SAR testing.

is not a concern. As a result, measurement drift is not as severe with MapSAR systems, and periodic correlation to compliance equipment is possible since the properties of the fluids do not change. Itron suggests that pre-compliance equipment be permitted as long as the margin of error is reported and the readings are below the RF maximum permissible exposure limits when worst case margins are taken into consideration.

For the foregoing reasons, Itron urges the Commission to clarify that the new SAR evaluation requirement proposed in revised Section 2.1093(c) does not apply to Section 15.247 devices intended for commercial-only use. However, if the Commission determines that the new SAR evaluation requirement should apply to commercial devices authorized under Section 15.247, Itron requests that pre-compliance equipment be permitted for SAR testing of such devices.

Respectfully submitted,

ITRON, INC.



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